(iii) prevention of expression of said undesired protein or proteins; in said mammal/an cell.

800 6.

- (Amended) A construct according to Claim 1 wherein said constituent is exogenous circular or linear DNA, exogenous circular or linear DNA encoding a [therapeutic exogenous] protein or peptide product, [or itself a/therapeutic product,] or encoding [therapeutic] RNA, or a vector comprising exogenous DNA encoding [therapeutic] RNA or encoding an [a therapeutic] exogenous protein or peptide product.
- 7. (Amended) A construct according to Claim 6 wherein said DNA is DNA which encodes a [therapeutic] protein or peptide product [which] wherein said protein or peptide product is not made or contained in said cell, or is DNA which encodes a [therapeutic] protein or peptide product, wherein said protein or peptide product is made or contained in said cell in abnormally low amount, or is DNA which encodes a [therapeutic] protein or peptide product, [which] wherein said protein or peptide product is made or contained in said cell in defective form or is DNA which encodes a [therapeutic] protein or peptide product, [which] wherein said protein or peptide product is made or contained in said cell in physiologically abnormal or normal amount, or encodes a [therapeutic] RNA.

8. (Amended) A construct according to Claim 7 wherein said [therapeutic] protein or peptide product is an enzyme, a receptor, a structural protein, a regulatory protein or a hormone.

- 9. (Amended) A construct according to Claim 1 <u>further</u> comprising SV40 [derived] *ori*DNA sequence as a replication regulatory element and further comprising a DNA sequence encoding one or more regulatory elements sufficient for the expression of said exogenous RNA or exogenous protein or peptide in said mammalian cell.
- 10. (Amended) A construct according to Claim 1 wherein said constituent is exogenous RNA, wherein said RNA is RNA which encodes a [therapeutic] protein or peptide product which is not made or contained in said cell, or is RNA which encodes a [therapeutic] protein or peptide product which is made or contained in said cell in

B

abnormally low amount, or is RNA which encodes a [therapeutic] protein or peptide product which is made or contained in said cell in defective form, or is RNA which encodes a [therapeutic] protein or peptide product which is made or contained in said cell in physiologically abnormal or normal amount, said RNA having regulatory elements, including translation signal or signals sufficient for the translation of said protein or peptide product in said mammalian cell, operatively linked thereto.

11. (Amended) A construct according to Claim 10 wherein said [therapeutic] protein or peptide product is an enzyme, a receptor, a structural protein, a regulatory protein or a hormone.

Const.

- 12. (Amended) A construct according to Claim 1 wherein said constituent is an [a therapeutic] exogenous protein or peptide product which is, respectively, a [therapeutic] protein or peptide product which is not made or contained in said cell, or is a [therapeutic] protein or peptide product which is made or contained in said cell in abnormally low amount, or is a [therapeutic] protein or peptide product which is made or contained in said cell in defective form or is a [therapeutic] protein or peptide product which is made or contained in said cell in physiologically abnormal or normal amount.
- 13. (Amended) A construct according to Claim 1 wherein said constituent is antisense RNA or DNA or ribozyme RNA.[.] or any RNA or DNA which inhibits or prevents the expression of undesired protein or proteins in said mammalian cell.
- 15. (Amended) A construct according to Claim 13 wherein said antisense RNA is antisense RNA directed against an [a] HIW transcript.

34 16.

- (Amended) A construct according to Claim 1 wherein said cell is a human cell selected from the group consisting of hemopoietic cells, epithelial cells, endothelial cells, liver cells, epidermal cells, muscle cells, [.] tumor cells, nerve cells and germ line cells.
- 17. (Amended) A construct according to Claim 16 wherein said hemopoietic cells are bone marrow cells, peripheral blood cells, [and] cord blood cells, or liver cells.

18. (Amended) A method for the *in vitro* construction of SV40 viruses or pseudoviruses comprising exogenous nucleic acid comprising the following steps:

a)[.] allowing a semi-purified of pure SV40 capsid protein or a mixture of at least two such proteins to self-assemble into SV40-like particles; and

b)[.] bringing the SV40-like particles assembled in step (a) into contact with said exogenous nucleic acid to give <u>in vitro constructed</u> [recombinant SV40] viruses, or <u>into contact</u> with a vector comprising said exogenous nucleic acid to give pseudoviruses.

19. (Amended) The method of Claim 18 wherein said [recombinant] *in vitro* constructed SV40 viruses or pseudoviruses are subjected to digestion by nuclease to remove non-packaged DNA.

24. (Amended) A method according to Claim 18 wherein said exogenous nucleic acid encodes a [therapeutic] protein or peptide product [or itself a therapeutic product].

25. (Amended) A method according to Claim 22 wherein said DNA is DNA which encodes a [therapeutic] protein or peptide product [which] wherein said protein or peptide product is not made or contained in said cell or is DNA which encodes a [therapeutic] protein or peptide product [which] wherein said protein or peptide product is made or contained in said cell in abnormally low amount, or is DNA which encodes a [therapeutic] protein or peptide product [which] wherein said protein or peptide product is made or contained in said cell in defective form or is DNA which encodes a [therapeutic] protein or peptide product. [which] wherein said protein or peptide product is made or contained in said cell in physiologically abnormal or normal amount or is DNA which encodes [a therapeutic] RNA.

26. (Amended) A method according to Claim 25 wherein said exogenous DNA encodes a [therapeutic] protein or peptide product which is an enzyme, a receptor, a structural protein, a regulatory protein or a hormone.

BY Cont.

500

BS



S 27.

- (Amended) A method according to Claim 18 wherein in step (b) SV40[-derived] *ori*DNA sequence is added and said exogenous nucleic acid has DNA sequence encoding one or more regulatory elements sufficient for the expression of said exogenous protein in said [mammalian] cell operatively linked thereto.
- 28. (Amended) A method according to Claim 18 wherein said exogenous nucleic acid is exogenous RNA, wherein said RNA is RNA which encodes a [therapeutic] protein or peptide product, [which] wherein said protein or peptide product is not made or contained in said cell, or is RNA which encodes a [therapeutic] protein or peptide product, [which] wherein said protein or peptide product is made or contained in [said cell] in abnormally low amount or is RNA which encodes a [therapeutic] protein or peptide product, [which] wherein said protein or peptide product is made or contained in said cell in defective form or is RNA which encodes a [therapeutic] protein or peptide product, [which] wherein said protein or peptide product is made or contained in said cell in physiologically abnormal or normal amount and wherein said RNA has regulatory elements, including translation signal, sufficient for the translation of said protein product in said mammalian cell, operatively linked thereto.

BS

- 29. (Amended) A method for the *in vitro* construction of [recombinant] SV40 viruses or pseudoviruses comprising an exogenous [therapeutic] protein or peptide comprising the following steps:
 - a)[.] allowing a semi-purified or purified SV40 capsid protein or a mixture of at least two such proteins to self-assemble into SV40-like particles; and
 - b)[.] bringing the SV40-like particles assembled in step (a) into contact with said exogenous protein to give [recombinant] *in vitro* constructed SV40 viruses or pseudoviruses.

065

30. (Amended) A method according to Claim 29 wherein said [recombinant] SV40 viruses or pseudoviruses are purified from any non-packaged protein.

31.

(Amended) A method according to Claim 29 wherein said exogenous protein or peptide is [are, respectively,] a naturally occurring or recombinant protein or peptide, a chemically modified protein or peptide, or a synthetic protein or peptide.

Sub) 32.

(Amended) A method according to Claim 31 wherein said exogenous protein or peptide [product] is[, respectively,] a [therapeutic] protein or peptide [product] not made or contained in said cell or <u>is</u> [are] a [therapeutic] protein or peptide [product] made or contained in said cell in abnormally low amount, or <u>is</u> [are] a [therapeutic] protein or peptide [product] made or contained in said cell in defective form or <u>is</u> [are] a [therapeutic] protein or peptide [product] made or contained in said cell in physiologically abnormal or normal amount.

33.

(Amended) A method according to Claim 32 wherein said cell is a human cell selected from the group consisting of hemopoietic[,] cells, muscle cells, tumor cells, nerve cells and germ line cells.

34.

(Amended) A method according to Claim 33 wherein said hemopoietic cells are bone marrow cells, peripheral blood cells, [and] cord blood cells, or liver cells.

Ond 35

(Amended) A method for the *in vitro* construction of SV40 pseudoviruses comprising exogenous antisense RNA, or ribozyme RNA or RNA or DNA which inhibits or prevents the expression of undesired protein or proteins in a mammalian cell, comprising the following steps:

- a)[.] allowing a semi-purified or pure SV40 capsid protein or a mixture of at least two such proteins to self assemble into SV40-like particles and
- b)[.] bringing said SV40-like particles obtained, in step (a) into contact with said exogenous antisense RNA, of ribozyme RNA, or RNA or DNA which inhibits or prevents the expression of undesired proteins in a mammalian cell, to give *in vitro* constructed [recombinant] SV40 pseudoviruses.

Blo

40. (Amended) A method according to Claim 35 wherein said antisense RNA is antisense RNA directed against an [a] HIV transcript.